



US007827733B2

(12) **United States Patent**  
**DiMaggio**

(10) **Patent No.:** **US 7,827,733 B2**  
(45) **Date of Patent:** **Nov. 9, 2010**

(54) **MOBILE GARDEN CART**

(76) Inventor: **Angela DiMaggio**, 2318 E. Huron Ct.,  
Gilbert, AZ (US) 85234-3816

(\*) Notice: Subject to any disclaimer, the term of this  
patent is extended or adjusted under 35  
U.S.C. 154(b) by 0 days.

(21) Appl. No.: **12/321,179**

(22) Filed: **Jan. 15, 2009**

(65) **Prior Publication Data**

US 2009/0183427 A1 Jul. 23, 2009

**Related U.S. Application Data**

(60) Provisional application No. 61/011,812, filed on Jan.  
22, 2008.

(51) **Int. Cl.**  
**A47G 7/00** (2006.01)

(52) **U.S. Cl.** ..... **47/39**

(58) **Field of Classification Search** ..... **47/39**  
See application file for complete search history.

(56) **References Cited**

**U.S. PATENT DOCUMENTS**

129,382 A \* 7/1872 Reimer ..... 148/323  
320,362 A \* 6/1885 Judd ..... 108/59  
D21,044 S \* 9/1891 Peters ..... D6/306  
D23,906 S \* 12/1894 Symonds ..... D6/405  
875,235 A 12/1907 Bastel

2,777,584 A \* 1/1957 Dobrin et al. .... 108/148  
3,365,840 A 1/1968 Cooper  
4,380,136 A \* 4/1983 Karpisek ..... 47/83  
4,608,776 A 9/1986 Kooy  
4,896,456 A \* 1/1990 Grant ..... 47/67  
4,899,487 A 2/1990 Brownlee  
5,044,118 A 9/1991 Ferris  
5,095,649 A 3/1992 Brownlee  
5,095,653 A 3/1992 Guldberg  
5,367,823 A \* 11/1994 Ferris ..... 47/39  
5,570,540 A 11/1996 Womack et al.  
D403,268 S 12/1998 Dignam  
6,402,167 B1 6/2002 Calleja  
6,932,363 B2 8/2005 D'Angelo

**FOREIGN PATENT DOCUMENTS**

DE 3835787 A1 4/1990  
FR 2568448 A1 \* 2/1986  
WO WO 2005/042332 A1 5/2005

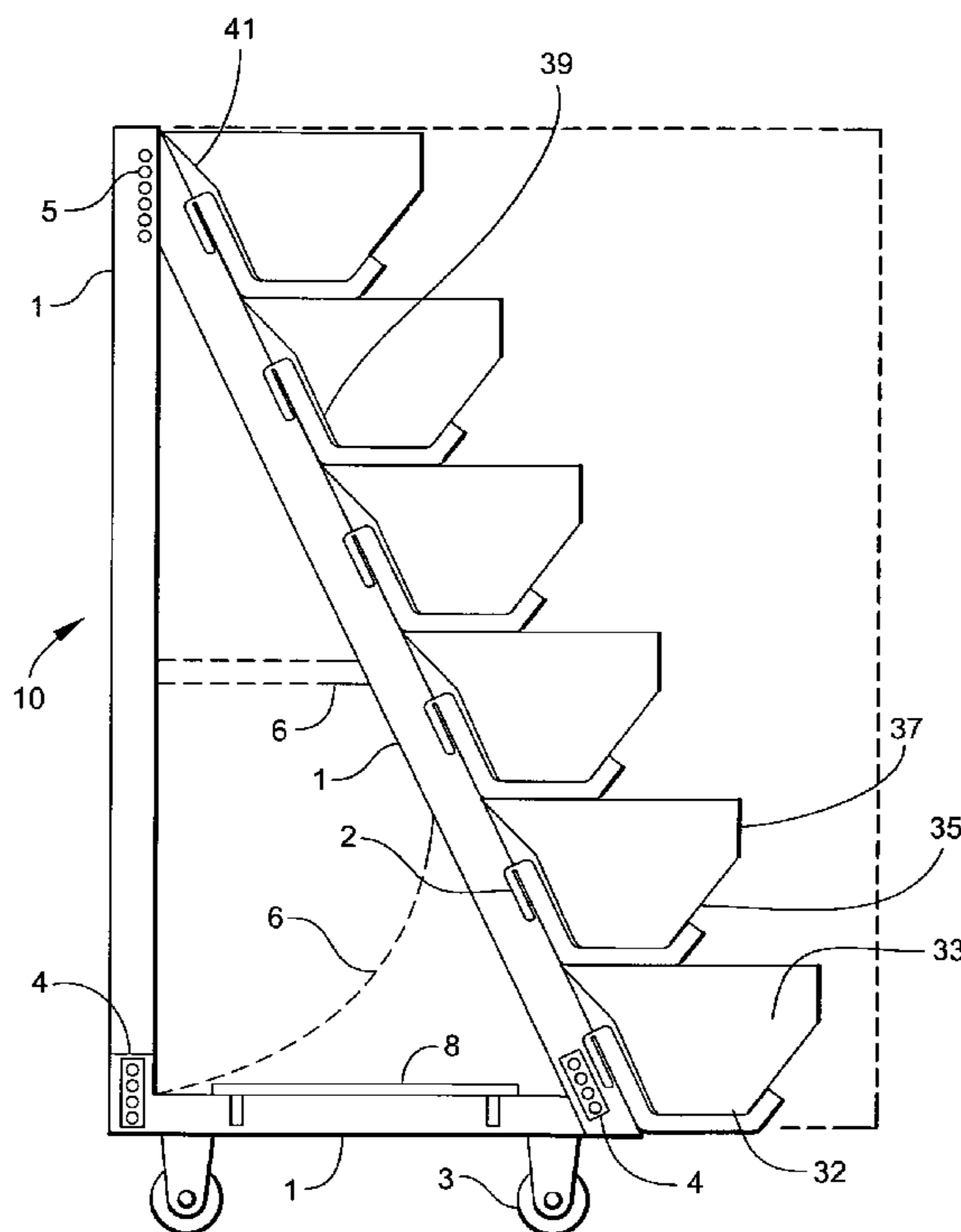
\* cited by examiner

*Primary Examiner*—Francis T Palo  
(74) *Attorney, Agent, or Firm*—The Halvorson Law Firm

(57) **ABSTRACT**

A kit for a mobile gardening cart that includes the following:  
a base structure, storage areas, and a plurality of wheels to  
allow it to pivot in any directions, an upright frame structure  
with reasonable braced support, linkage/connection to a main  
vertical frame, and multiple stackable container forms to be  
placed parallel to each other in an ascending upward fashion  
on the upright frame structure.

**6 Claims, 8 Drawing Sheets**



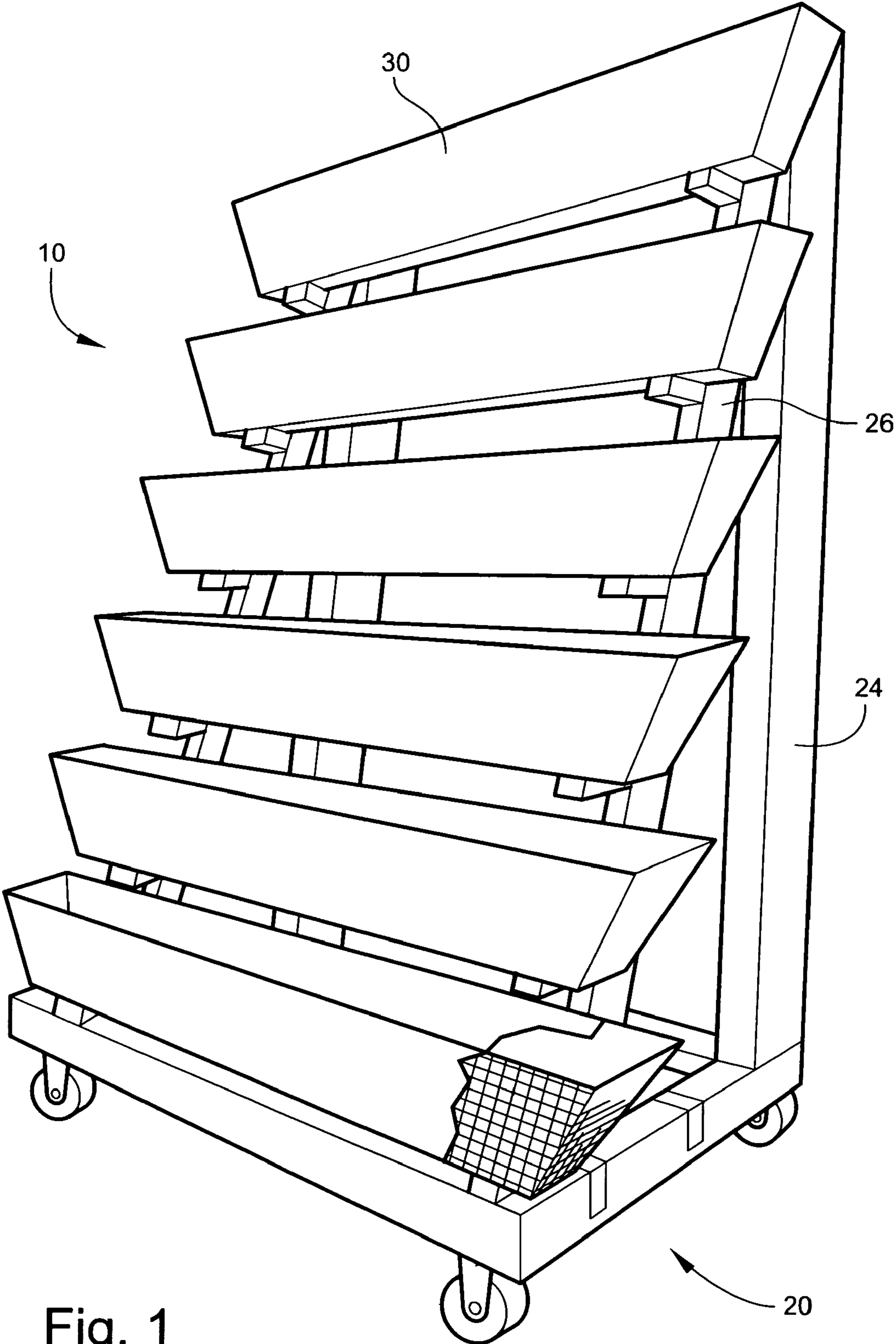


Fig. 1

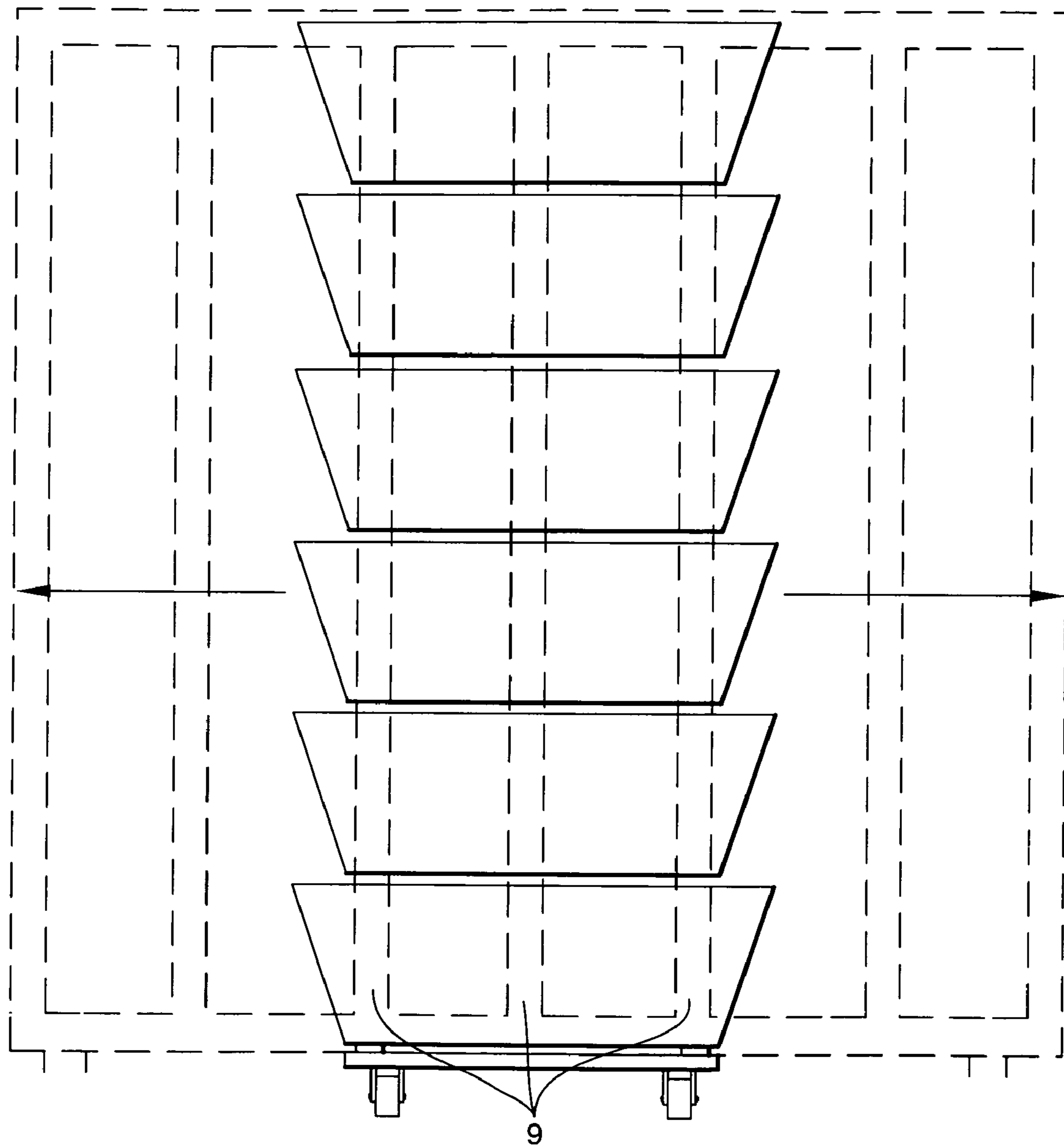


Fig. 2A

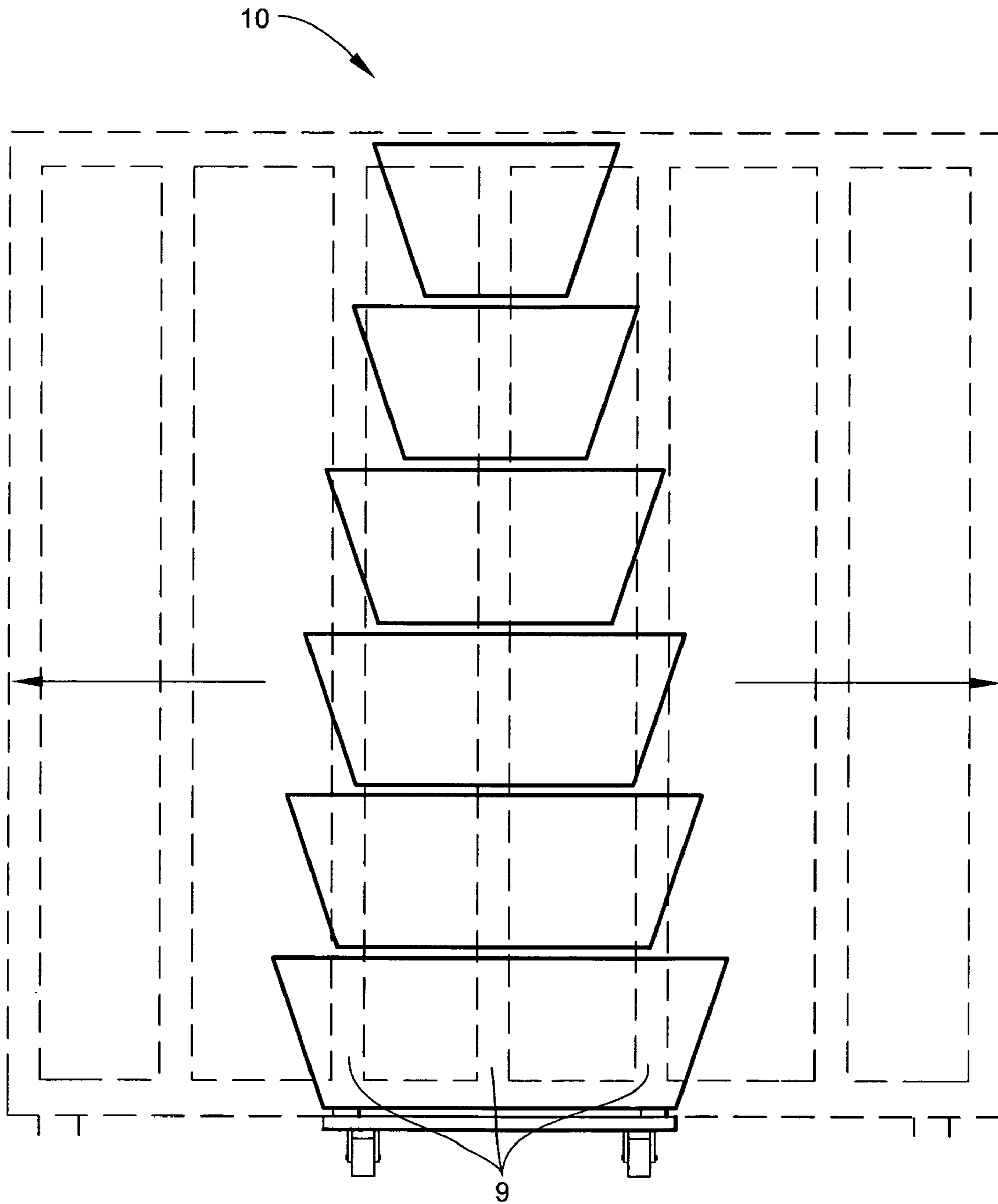


Fig. 2B

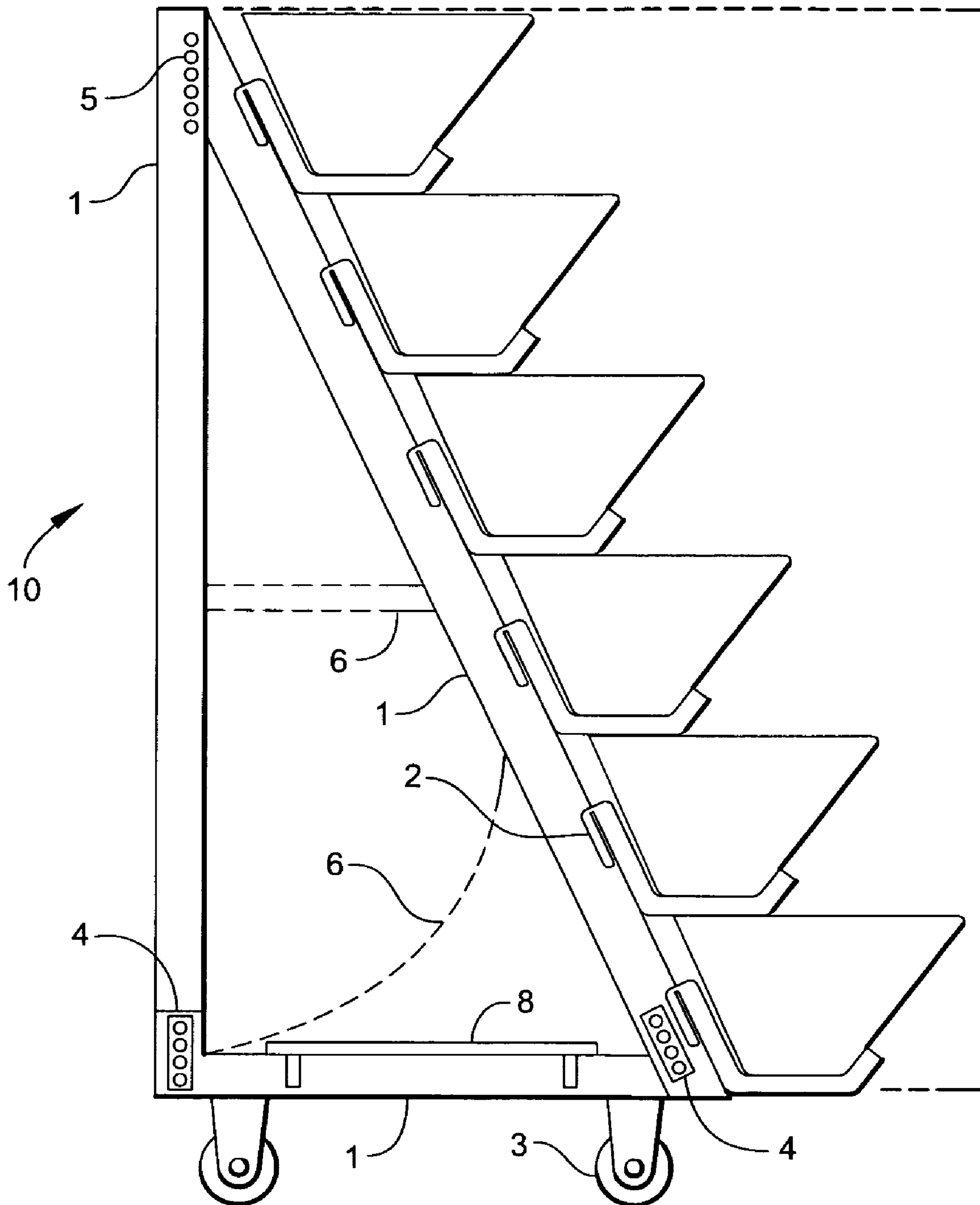


Fig. 3A

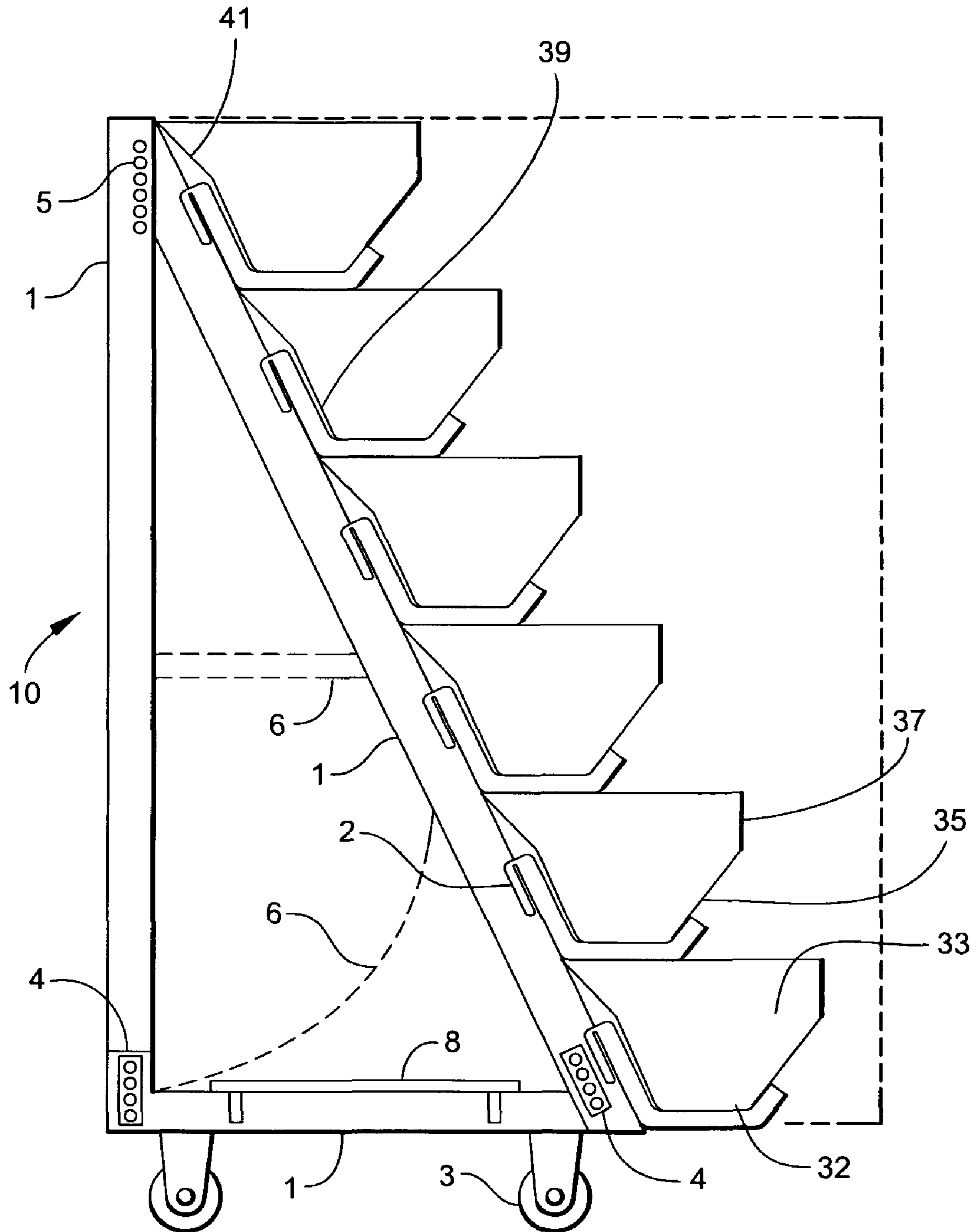
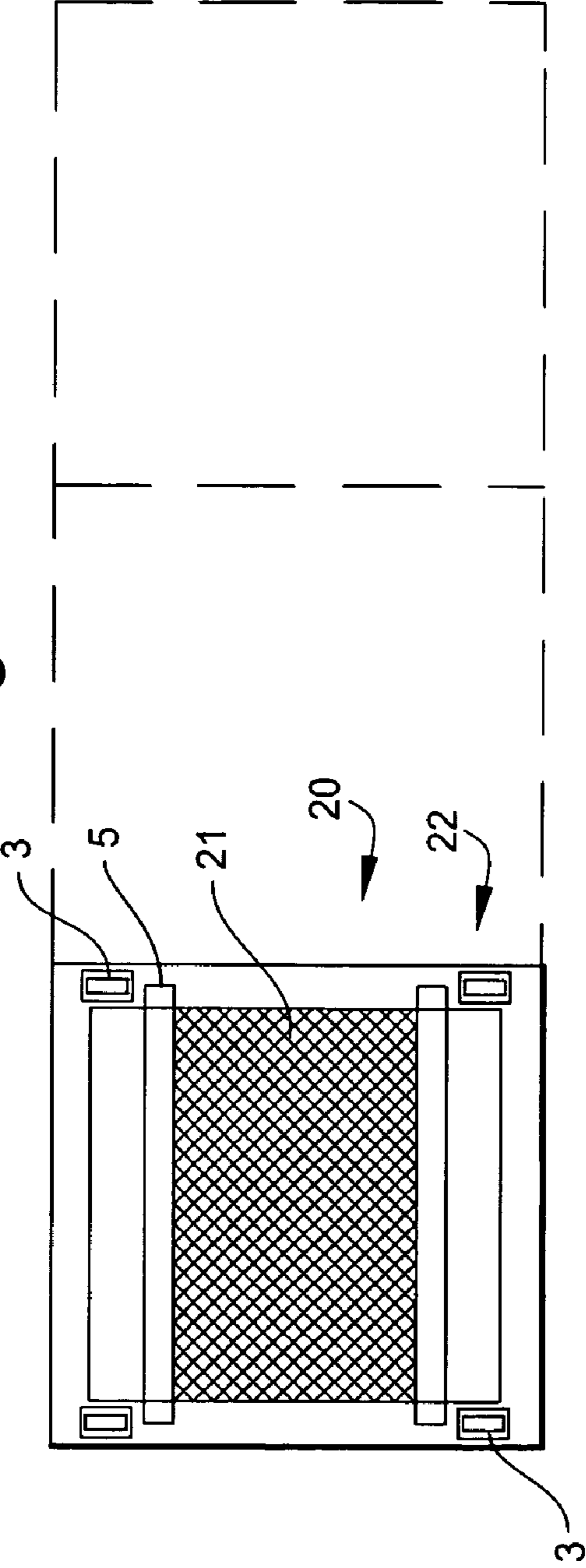


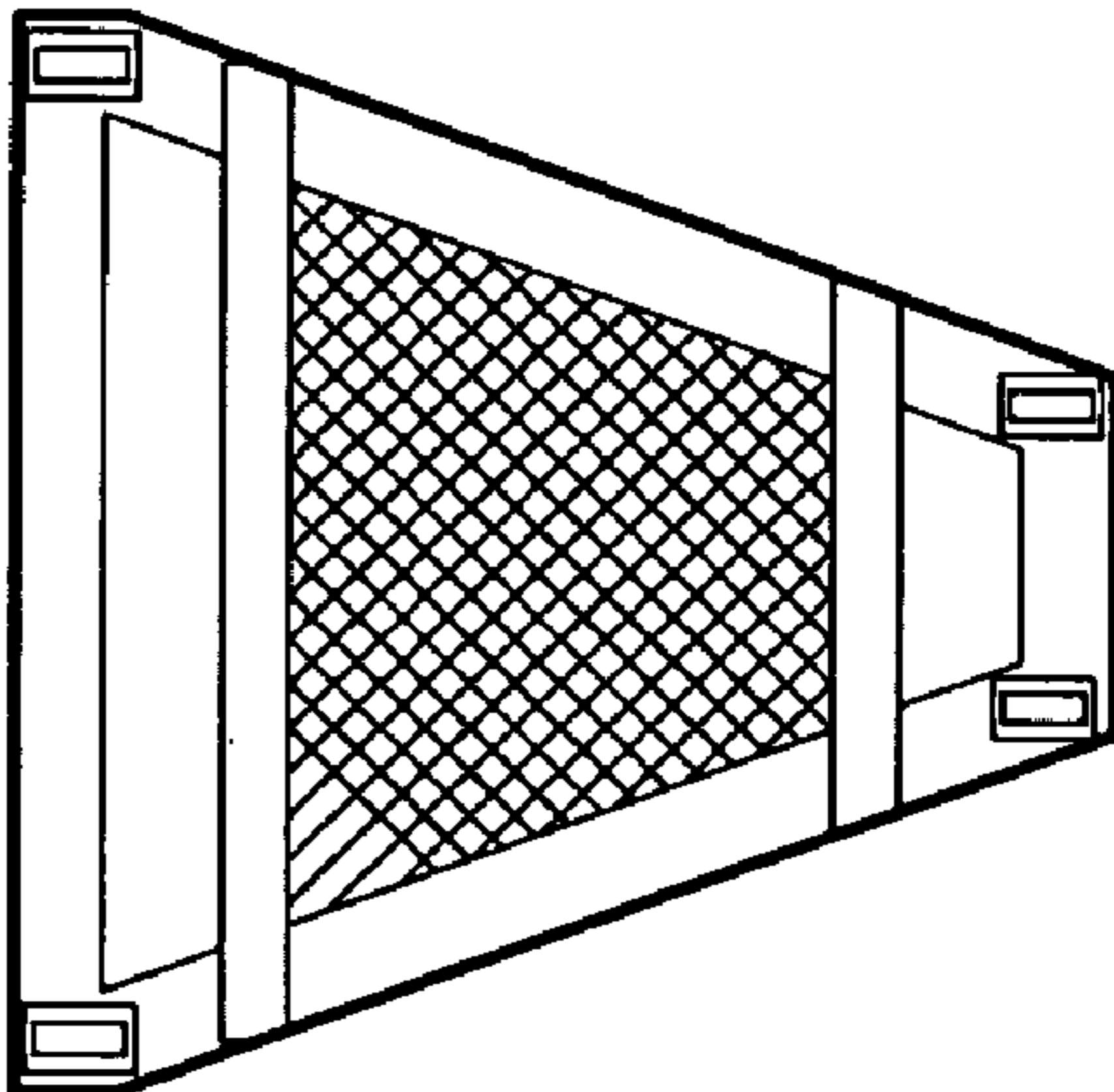
Fig. 3B

Fig. 4A



20

Fig. 4B



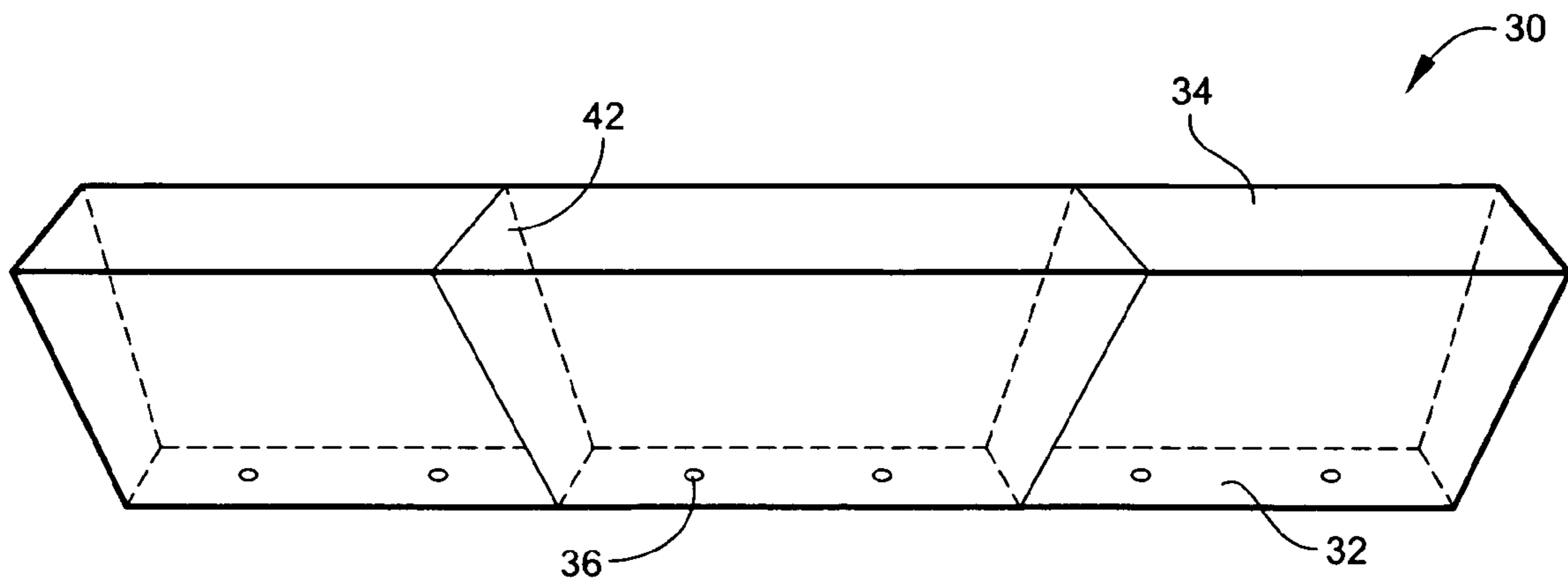


Fig. 5

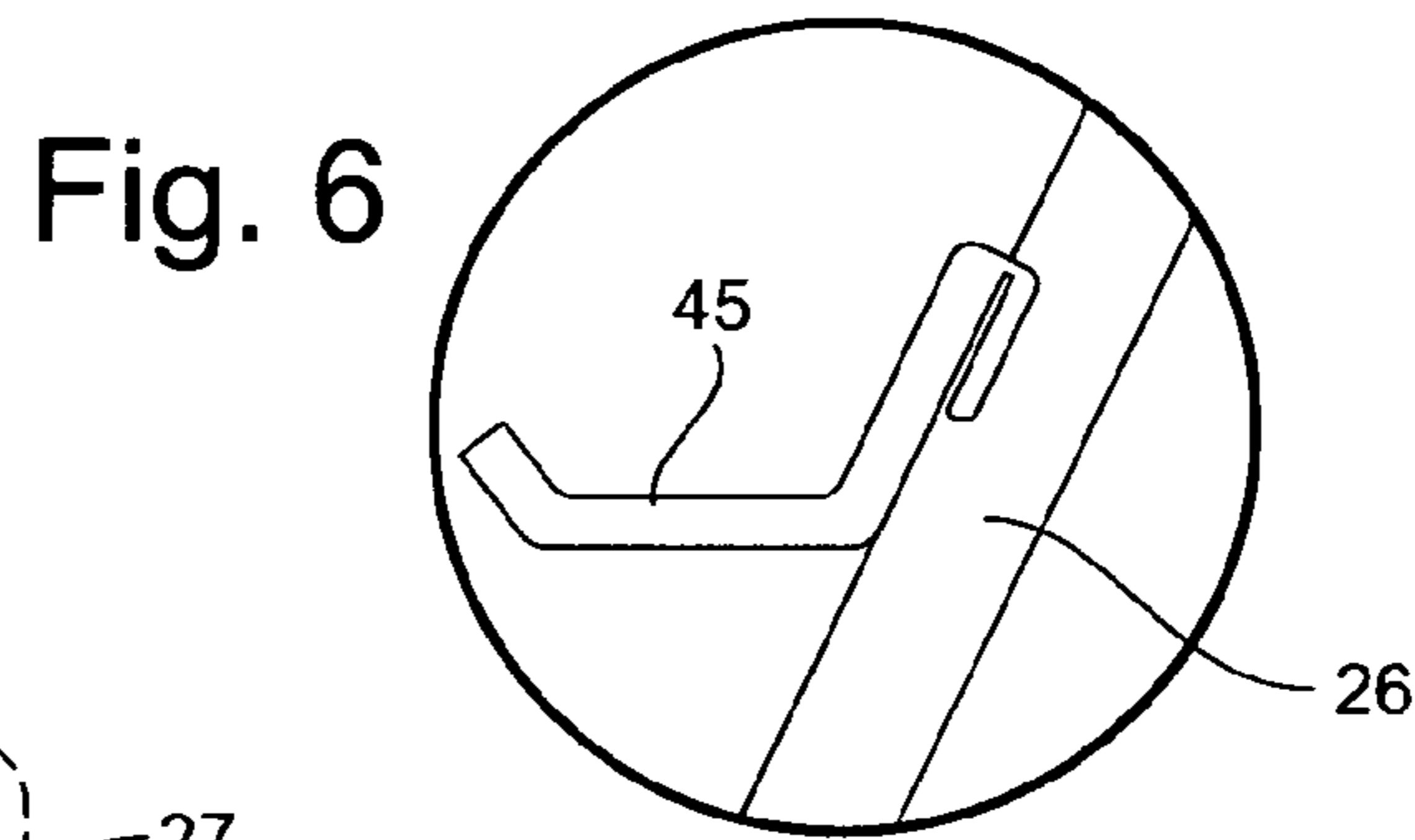


Fig. 6

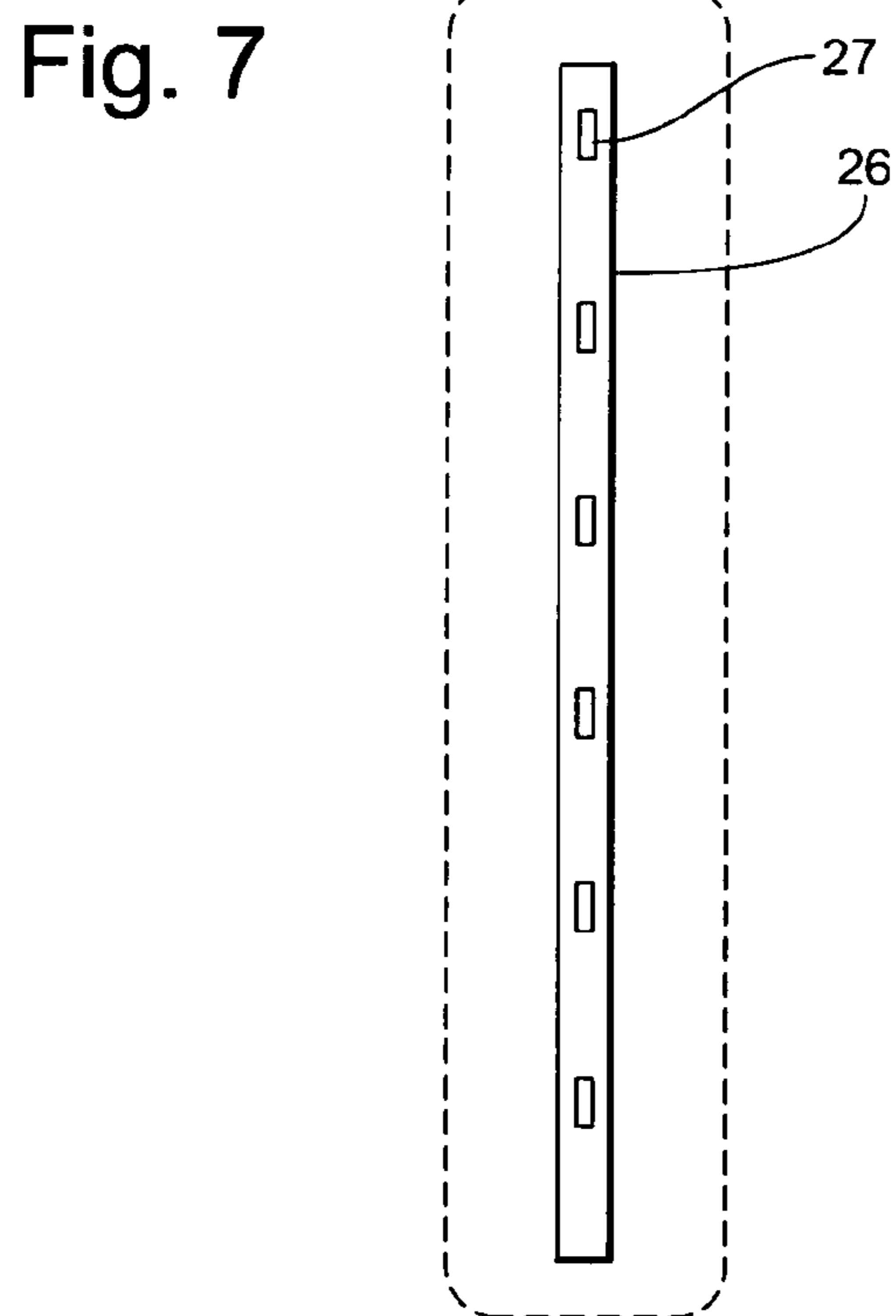


Fig. 7

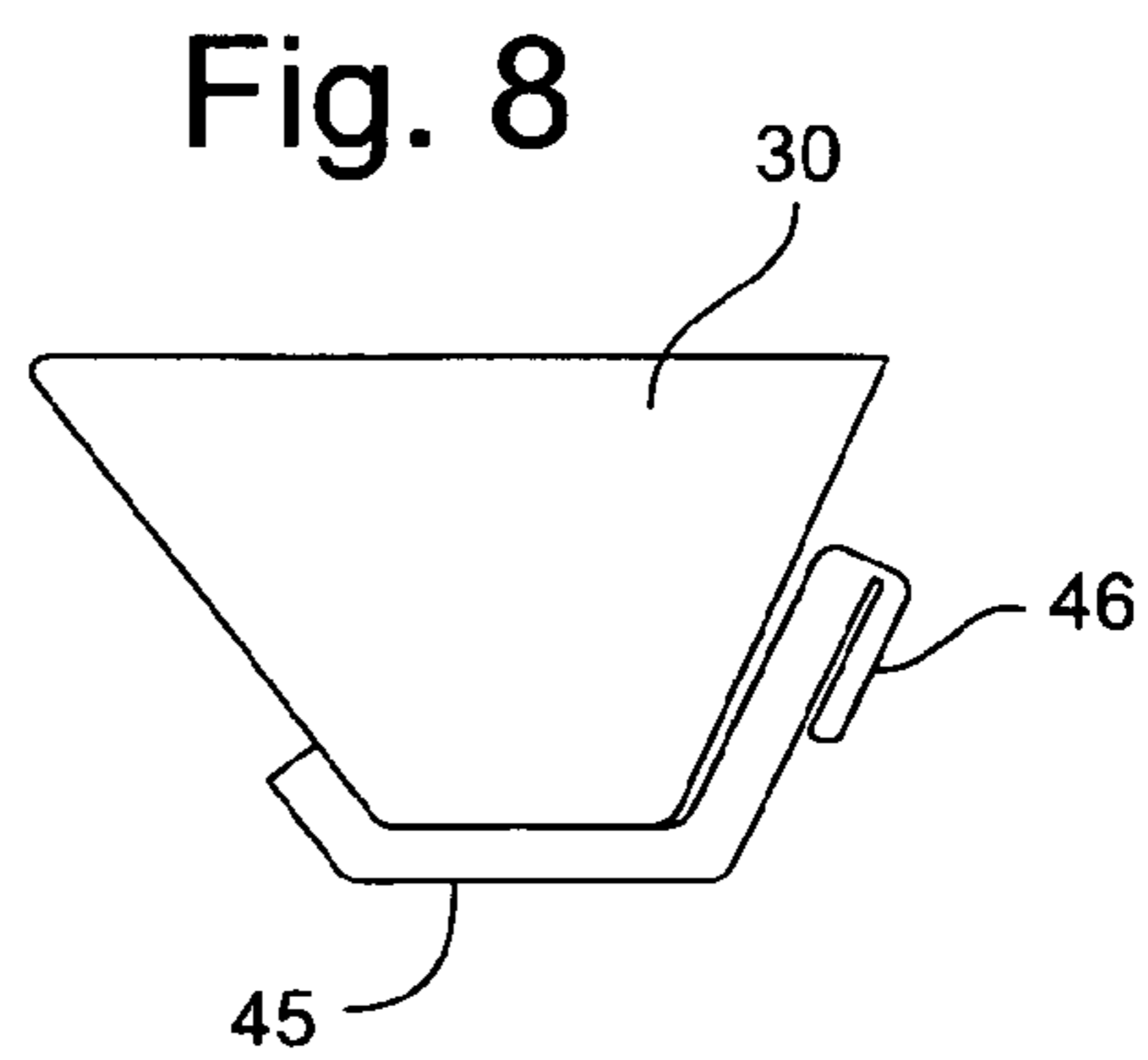


Fig. 8

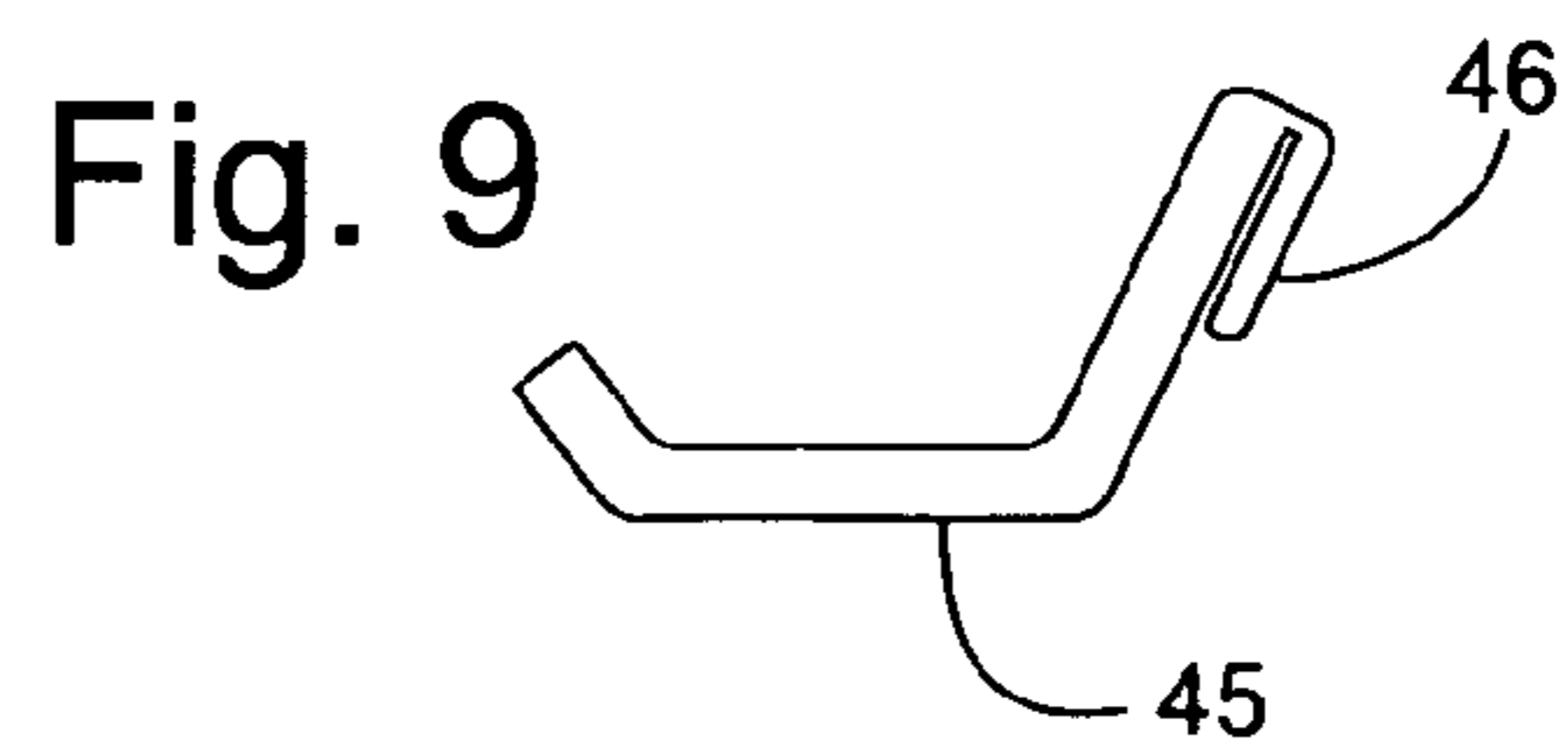


Fig. 9



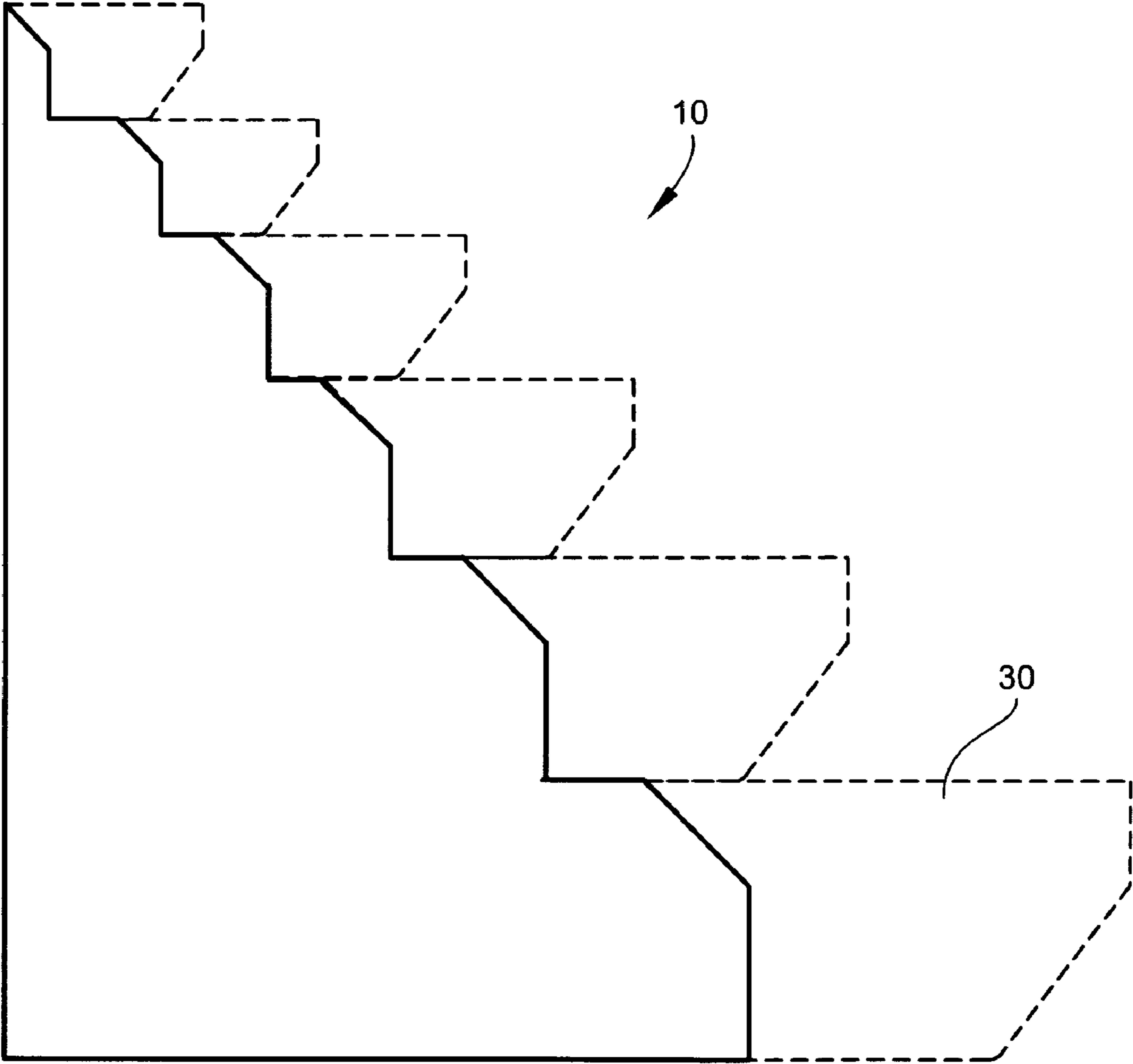


Fig. 10

1

**MOBILE GARDEN CART**

This application is a continuation in part of U.S. Provisional patent application 61/011,812 filed on Jan. 22, 2008.

## FIELD OF THE INVENTION

The present invention relates to the field of gardening. More specifically, the present invention relates to the field of mobile garden carts.

## BACKGROUND

The present invention relates to gardening carts for the plant or garden hobbyist or horticulturist. An urban gardener frequently is limited in space for plants because of the conventional utilization of living space around the house or apartment. The urban gardener is faced with the choice of dedicating a portion of their living area to the gardening effort and loss of utility of the area or the pursuit of the hobby in full view of visitors. While the trappings of the gardener produce the beauty and joy of mature fruit and flowers, the present invention provides an attractive gardening area that is mobile and will complement the decor of the living space.

Moreover, the present invention provides both a decorative and attractive aspect to the gardening function. With the disclosed gardening cart, the structure may be readily assembled and utilized for the period necessary. The gardening cart may then be easily transported to another. While the structure is functional and sturdy, its the simplistic design and assembly provides an attractive help-mate to the gardener.

Further application of the present invention may be found in the portability of the gardening cart as used for early planting of vegetable seedlings. In such application, the seedling house may be set out of doors during the warmer, sunny days to encourage the germination and growth of the seeds. The cart is then readily returned indoors for the cool evenings or colder, dark days which could inhibit plant growth.

## SUMMARY OF THE INVENTION

It is an object of the present invention to provide a kit and device for mobile gardening comprising a base structure, at least one vertical support attached to a rear end of the base structure, at least one diagonal support attached between a front end of the base structure and a top end of the vertical support, said diagonal support further comprising a plurality of bracket receiving slots; at least two growing containers, each growing container comprising at least a base and at least one side, capable of holding soil or other plant material, said base having at least one water drainage aperture; and at least two brackets attaching the at least two growing containers to the diagonal supports of the cart.

It is another object of the present invention to provide the kit and device for mobile gardening wherein the at least two growing containers are all the same size.

It is yet another object of the present invention to provide the kit and device for mobile gardening wherein the at least two growing containers are different sizes.

## BRIEF DESCRIPTION OF THE DRAWINGS

FIG. 1 shows a perspective view of one embodiment of the present invention.

FIG. 2A shows a front view of one of the embodiment of the present invention.

2

FIG. 2B shows a front view of an alternate embodiment of the present invention.

FIG. 3A shows a side view of one embodiment of the present invention.

5 FIG. 3B shows a side view of another alternate embodiment of the present invention.

FIG. 4 shows a bottom view of one embodiment of the present invention. The broken lines illustrate various possible widths that may be adopted for this invention.

10 FIG. 5 shows a perspective of the front of one of the containers of the present invention illustrating drainage holes.

FIG. 6 shows a side view of a bracket attachment as it relates to the support frame of the present invention.

15 FIG. 7 shows a front view of a chassis support member with precut bracket attachment slots.

FIG. 8 shows a side view of a planter and bracket.

FIG. 9 shows a side view of a planter box attachment.

20 FIG. 10 shows a side view of an alternate embodiment of diagonal support structure configured to receive growing containers.

Reference now will be made in detail to various aspects of this invention, including the presently preferred embodiments. Each example is provided by way of explanation of embodiments of the invention, not limitation of the invention.

25 In fact, it will be apparent to those skilled in the art that various modifications and variations can be made in the present invention without departing from the spirit or scope of the invention. For instance, features illustrated or described as part of one embodiment can be used on another embodiment to yield a still further embodiment. Thus, it is intended that the present invention cover such modifications and variations within the scope of the appended claims and their equivalents.

## DETAILED DESCRIPTION

35 The present invention is useful for home gardening. Specifically, it is useful in that it allows relocation of home patio gardens as the user desires.

40 FIGS. 1 to 9 show an exemplary mobile garden cart 10 that is suitable for use as an upright terraced growing container system.

The cart 10 according to the present invention comprises a base structure 20. One preferred base structure 20 is rectangular with four sides, two short sides and two long sides. 45 Another preferred base structure 20 is trapezoidal with four sides, two angles sides, a short side, and a long side. Other shapes may be used and still fall within the scope of the present invention. The inside area of the base structure 20 is spanned by a tray, netting or mesh 21.

50 The base structure 20 is movable comprising at least one movement enabling structure 22. In one preferred embodiment the movement enabling structure 22 comprises four casted wheels. In another preferred embodiment, the movement enabling structure 22 comprises three casted wheels. 55 In an alternate embodiment, the movement enabling structure 22 comprises four low friction slide pads. Other movement enabling structures may be used and still fall within the scope of the present invention.

60 Attached to a rear to the rear of the base structure 20 is at least one vertical support 24. The vertical support 24 extends upward from a top surface of the rear of the base structure 20. In the preferred embodiment, there are two vertical supports 24, however, other numbers of vertical supports, such as one, three, etc. may be used and still fall within the scope of the instant invention. 65

The cart 10 further comprises at least one diagonal support 26, which extends from the front of the base structure 20 to the

3

top of the at least one vertical supports **24**. Preferably there are the same number of diagonal supports **264** as vertical supports **24**. Each diagonal support **26** further comprises a plurality of bracket receiving slots **27**, shown in FIG. 7. Alternately, the diagonal supports **264**, may include cut out sections that are configured to securely receive growing containers **30**, shown in FIG. 10. This attachment may be by brackets, adhesives, notches and corresponding tangs and other like attachment structures and still fall within the scope of the present invention.

Attached in a tiered fashion to the diagonal supports **264** are at least two growing containers **30**. Preferably the at least two growing containers **30** are symmetrically attached but asymmetrical attachment is considered. Critically, at least a portion of each growing container **30** is directly over the growing container below (with the exception of the bottom growing container). Thus, the angle of the diagonal support must be sufficient enough to place at least a portion of each growing container **30** over the one below.

Each growing container **30** is attached to the diagonal supports **26** by at least one bracket **45**, shown in FIGS. 6, 8 and 9. The preferred bracket **45** is generally J-shaped with the lower portion of the J-shape capable of receiving a growing container **30**. The top of the J-shape further includes a tab **46** for receipt within the bracket receiving slots **27**, thereby securing the J-shape of the bracket **45** to the diagonal support **26**. Alternately, the diagonal supports **26** may have notches that receive the growing containers **30**.

Each growing container **30** is capable of holding soil or other plant base matter. One preferred embodiment of growing container **30** has a base **32** with four non-vertical, outwardly angled sides **34**. These growing containers **30** are sized to be stacked inside of each other when shipped in the disassembled state. Critically, each the base **32** of each growing container **30** further comprises at least one drainage aperture **36**. These drainage apertures should be located that when water flows through them, the water is received by the growing container below (with the exception of the bottom growing container), thereby reducing water wastage.

In an alternate embodiment, shown in FIG. 2B, the at least two growing containers **30** may be of descending sizes such that each successive descending growing container is significantly longer than the one above. These growing containers **30** are sized to be stacked inside of each other when shipped in the disassembled state.

In another alternate embodiment, shown in FIG. 3B, the at least two growing containers **30** may comprise the base **32**, two sides **33**, a forward angled front side **35** having a vertical lip **37**, and a rearward angled rear side **39** having an angled rear lip **41**. Thus water trickling down from an above container **30** may be intercepted by the rear lip **41** and directed

4

down the rear side **39** into the soil of the container **30**. These growing containers **30** are sized to be stacked inside of each other when shipped in the disassembled state.

As shown in FIG. 5, the growing containers **30** may be sectionable by means of at least one partition **42** that may be inserted into the interior of the growing containers **30**.

While the invention has been described in detail with respect to specific embodiments thereof, it will be appreciated that those skilled in the art, upon attaining an understanding of the foregoing, may readily conceive of alterations to, variations of, and equivalents to these embodiments. Accordingly, the scope of the present invention should be assessed as that of the appended claims and any equivalents thereof.

What is claimed is:

1. A kit for gardening comprising a cart comprising a base structure, at least one vertical support attached to a rear end of the base structure, at least one diagonal support attached between a front end of the base structure and a top end of the vertical support, said diagonal support further comprising a plurality of bracket receiving slots; at least two growing containers, each growing container comprising a base, two sides, a forward angled front side having a vertical lip that extends between  $\frac{1}{2}$  to  $\frac{1}{4}$  the height of the growing containers, and a rearward angled rear side having an angled rear lip that extends between  $\frac{1}{2}$  to  $\frac{1}{4}$  the height of the growing containers, capable of holding soil or other plant material, said base having at least one water drainage aperture; and a structure for attaching the at least two growing containers to the diagonal supports of the cart.

2. The kit according claim 1 wherein the at least two growing containers are all the same size.

3. The kit according to claim 1 wherein the at least two growing containers are different sizes.

4. A device for gardening comprising a cart comprising a base structure, at least one vertical support attached to a rear end of the base structure, at least one diagonal support attached between a front end of the base structure and a top end of the vertical support, said diagonal support further comprising a plurality of bracket receiving slots; at least two growing containers, each growing container comprising a base, two sides, a forward angled front side having a vertical lip, and a rearward angled rear side having an angled rear lip, capable of holding soil or other plant material, said base having at least one water drainage aperture; and a structure for attaching the at least two growing containers to the diagonal supports of the cart.

5. The device according to claim 4 wherein the at least two growing containers are all the same size.

6. The device according to claim 4 wherein the at least two growing containers are different sizes.

\* \* \* \* \*